




**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

THE TRUSTEES OF COLUMBIA)	
UNIVERSITY IN THE CITY OF NEW)	
YORK and QIAGEN SCIENCES, LLC,)	
)	
Plaintiffs,)	Civil Action No. 19-1681-CFC
)	
v.)	
)	
ILLUMINA, INC.,)	
)	
Defendant.)	
)	
)	

**PLAINTIFFS’ MOTION FOR RECONSIDERATION OF THE COURT’S
CLAIM CONSTRUCTION ORDER**


Pursuant to D. Del. LR 7.1.5(a), plaintiffs, by and through their undersigned counsel, respectfully request clarification, or, in the alternative, reconsideration of this Court’s construction of the term “”. In support of this motion, plaintiffs state as follows:

I. INTRODUCTION

Plaintiffs respectfully request clarification of this Court’s construction of the term “,” which the Court defined as “a single linker that directly connects the base to the label.” (Ex. 1 [Claim Construction Hearing Tr.] at 57:13-16.) Plaintiffs do not take issue with construing “” as a single linker directly connecting the base to the tag. Plaintiffs only seek clarification that this construction covers a

single linker even if it was originally synthesized from multiple smaller chemical groups.¹

If the Court agrees that its construction does not exclude such a single linker just because the single linker was itself made from multiple chemical groups, plaintiffs seek no further relief from the Court. However, if the Court disagrees, plaintiffs respectfully ask for reconsideration because such a construction:

- a. permits Illumina to simultaneously obtain diametrically opposite claim constructions under the same *Phillips* standard for non-infringement and invalidity;
- b. is mistakenly premised on the belief that plaintiffs sought a construction of “” to mean *both* the one structure connecting the base to the tag, *and* subgroups (*see* Ex. 1 at 55:12-23), and this would improperly read out *all* of the embodiments in the patents-in-suit;
- c. improperly denies plaintiffs the benefit of the canon of construction that “a singular noun encompasses the plural for claim construction purposes”;

¹ A POSA understands that a “single linker” connecting the base to the tag is typically made from smaller chemical groups that can also be referred to as linkers. (Ex. 4, ¶ 72.)

- d. does not appear to have considered the evidence that “everybody knows linker can include multiple linkers” (Ex. 1 at 50:9-11); and
- e. improperly considers statements by Columbia in a prior IPR as “disclaimers” even though the PTAB rejected the statement and *invalidated* the patent.


II. ARGUMENT

The Federal Circuit recognizes that “district courts may engage in rolling claim construction, in which the court revisits and alters its interpretation of the claim terms” as new evidence becomes available. *Pfizer, Inc. v. Teva Pharms., USA, Inc.*, 429 F.3d 1364, 1377 (Fed. Cir. 2005); *ViiV Healthcare v. Gilead Scis.*, 437 F. Supp. 3d 395, 402 (D. Del. 2020). Reconsideration is appropriate when needed to prevent manifest injustice or clear errors of law, and when new evidence is available. *Lazaridis v. Wehmer*, 591 F.3d 666, 669 (3d Cir. 2010). Motions for reconsideration also are appropriate when the court has misunderstood a party or made an error not of reasoning but of apprehension. *Pacific Biosciences v. Oxford Nanopore Techs.*, No. 17-275, 2019 U.S. Dist. LEXIS 98526, at *4 (D. Del. Jun. 12, 2019).

A. The Current Construction Would Result in Manifest Injustice

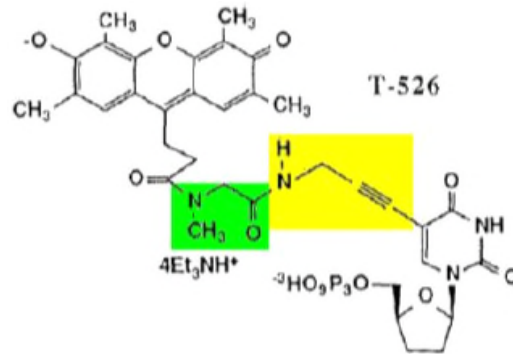
The current claim construction would result in manifest injustice. If the Court’s construction precludes “single linker” from encompassing linkers made

from multiple chemical groups, it would unfairly permit Illumina to achieve different claim constructions under the same *Phillips* standard for purposes of infringement and invalidity. *See Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1330 (Fed. Cir. 2003) (“It is axiomatic that claims are construed the same way for both invalidity and infringement.”)

Recently, Illumina averred in five IPR Petitions against the patents-in-suit (all subject to the *Phillips* standard of claim construction) that Columbia’s claimed “-based “linker” reads on prior art where the linker includes multiple chemical linkers; and, critically, that “no [Illumina] proposed litigation construction affects the merits of this petition.” (*See, e.g.*, Ex. 2 [IPR2020-00988, Paper 1 (Petition)] at 12.) Notably, the “linker” construction that Illumina seeks in those recent IPRs matches (a) Columbia’s construction (Ex. 3 [IPR2020-00988, Paper 11 (Patent Owner’s Preliminary Resp.)] at 6-8; Ex. 4 [IPR2020-00988, Ex. 2020 (Declaration of Kenneth Johnson)] at ¶ 71), (b) the PTAB’s construction in the prior IPRs (JA0040-41, n.33),² and (c) Illumina’s position in its invalidity contentions in this case (*see* Ex. 5 [Illumina’s Initial Invalidity Contentions, App’x B] at 35 [8].).

² “JA” is the Joint Appendix [D.I. 55].

In particular, in the pending IPRs and its current invalidity disclosures in this case, Illumina argues that “the linker” disclosed in Prober’s Figure 2A (along with Dower) discloses Columbia’s “linker.” (*See e.g.*, Ex. 2 at 53.) It is undisputed that Prober’s singular “linker” in Figure 2A contains multiple chemical groups:



(*See* Ex. 4 at ¶ 75 (annotating Ex. 6 [*Prober*] at Fig. 2A, to show multiple chemical groups); Ex. 7 [IPR2018-00291, Ex. 1139 (Illumina’s Demonstratives)], Slide 49.)


Thus, Illumina uses a construction of Y/linker that includes linkers made of multiple chemical groups.

Finally, Illumina filed the ongoing IPRs in 2020, *after* Columbia’s alleged disclaimer in 2019, confirming that Illumina understood that Columbia’s alleged disclaimer did not exclude a linker made of multiple chemical groups. In these IPRs, while stating that its proposed construction did not conflict with any claim construction in this litigation, Illumina used a construction of “linker” that would encompass a linker made of multiple chemical groups. Given these facts, it would be manifestly unjust to reward Illumina’s actions and permit the claim construction

here to directly contradict it and Columbia's common position in the prosecution history of the patents-in-suit.

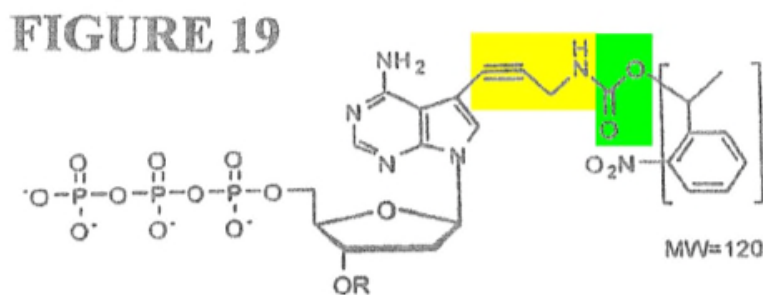
B. Plaintiffs Did Not Seek Two Constructions of “Linker,” and the Construction Incorrectly Excludes *All* Embodiments

Plaintiffs believe the Court misunderstood their position with respect to “linker.” During the hearing, the Court stated that the patent owner had not made it clear whether “linker” was “the overall structure that lies between and connects the tag to the base, or . . . a subgroup within that overall structure.” (Ex. 1 at 53:22-54:5.) But plaintiffs did not seek to construe “linker” or “subgroups.” Misunderstanding on this point between the Court and the parties justifies reconsideration. *Pacific Biosciences*, 2019 U.S. Dist. LEXIS 98526, at *4 (granting motion for reconsideration, noting that the Court “misapprehended certain factual arguments”).

Plaintiffs have consistently stated in their briefs and at the hearing that both “” and “linker” refer to the entire structure that connects the base to the tag. (Joint Claim Construction Br. (“Joint Br.”) [D.I. 54] at 10, 11, 23, 24, 41, 43, 44, 46, 47; Ex. 1 at 6:2-4, 6:11-12, 9:7-9, 10:20-21, 11:24-12:1, 12:15-20, 27:10-12, 30:21-22, 34:8-9.) Plaintiffs sought to avoid a construction that could exclude a single linker made of smaller linkers, because there was nothing in the claims or written description supporting such a limiting construction. *See e.g., Renishaw PLC v. Marposs Societa' Per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998) (“if an

apparatus claim recites a general structure (*e.g.*, a noun) without limiting that structure to a specific subset of structures (*e.g.*, with an adjective), we will generally construe the claim to cover all known types of that structure that are supported by the patent disclosure.”)




Critically, clarification is needed so that the Court’s construction does not improperly read out *all of the embodiments*. *Nelcor Puritan Bennett v. Masimo Corp.*, 402 F.3d 1364, 1368-69 (Fed. Cir. 2005) (noting that a construction that “plac[es] all the embodiments of the invention outside the scope of the claims is powerful evidence that the court’s construction is incorrect” and declining to adopt such a construction). Illumina stated at the hearing that Figure 21 was consistent with its “single linker” construction, without any evidence. (Ex. 1 at 50:23-24). However, after the *Markman* hearing, in a current IPR representing the still-developing intrinsic record of the patents-in-suit, Columbia’s expert stated that the structure shown in Figure 21 contains “a ‘linker’” “consisting of more than one chemical group”:



(Ex. 4, ¶ 74 (annotating Fig. 19 (which has the same linker as Figure 21) to show multiple chemical groups). Clarification is needed to ensure that there is not a construction that could exclude all embodiments.


C. As a Matter of Law, a Linker Means One or More Linkers

The Federal Circuit has stated that in claim construction, the “use of the singular form of a word does not preclude a meaning which includes the plural.” *Embrex, Inc. v. Sev. Eng’g Corp.*, 216 F.3d 1343, 1348 (Fed. Cir. 2000); *see also Bushnell Hawthorne, LLC v. Cisco Sys.*, No. 19-2191, 2020 U.S. App. LEXIS 15486, at **10-11 (Fed. Cir. May 14, 2020) (“It is true that, as a general rule, a singular noun encompasses the plural for claim construction purposes.”); *Renishaw*, 158 F.3d at 1250; *Mylan Pharma v. Kremers Urban Dev.*, No. 02-1628, 2004 U.S. Dist. LEXIS 391, at *9 (D. Del. Jan. 13, 2004) (“If the specification discloses a singular embodiment it ‘does not disclaim a plural embodiment.’”).

Here, the Court erred by finding this rule “inapposite,” simply because the parties were construing “” not “a linker.”³ In construing “”, the Court and each party agreed that “” was “a linker.” (*See* Ex. 1 at 55:12-15 (Court noting,

³ Moreover, although application of the “singular includes the plural” rule is often expressed in terms of singular terms modified by “an” or “a,” Illumina did not raise this issue and plaintiffs have found no case finding the rule is unavailable as a matter of law when the disputed term is in the singular but there is no article. *See supra* at 8-9.

“the disputed term is defined in the claim itself as representing *a* ... linker”); 44:2 (defendant agreeing “Y is a linker”); 30:14 (plaintiffs agreeing to same).)

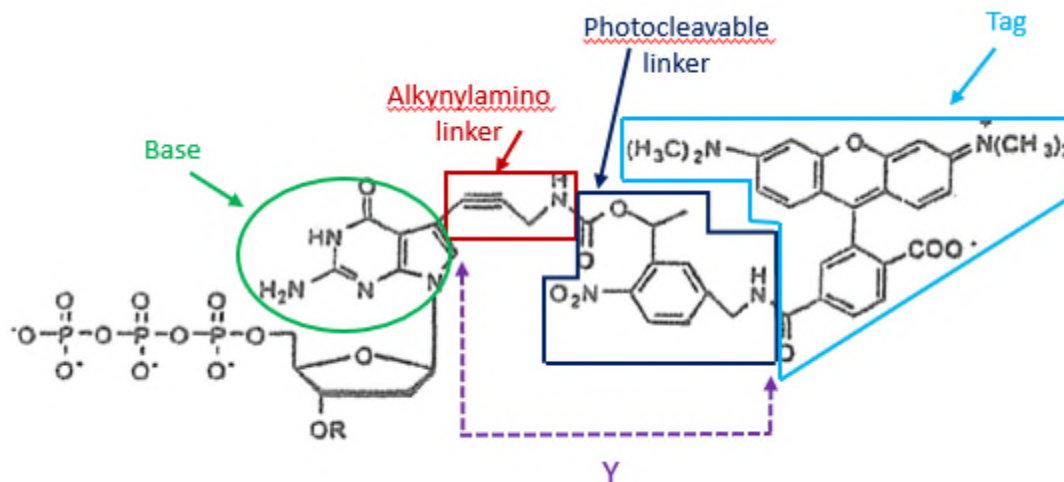
Nonetheless, the Court found that the use of “linker” in the claims and written description in the “singular” tense served to confine “linker” only to a single linker itself made of one linker, because linker was preceded by the article “a.” However, since “linker” is preceded by the article “a,” the Court erred in not construing “” as not including a single linker itself made of one or more linkers.

D. The Evidence Shows that a POSA Understands the Term “Linker” to Include a Linker Made of Multiple Chemical Groups or Linkers

The Court had it right when it suspected “everybody knows linker can include multiple linkers.” (Ex. 1 at 50:9-11.) Plaintiffs provided evidence that a POSA used the term “linker” even if made of multiple chemical groups. Illumina provided zero evidence to the contrary. Thus, the Court erred in finding that a POSA would not understand linker as one that could be made of multiple chemical groups or linkers.

Plaintiffs provided both intrinsic and extrinsic evidence that when a POSA refers to “a linker” the linker may be made from multiple linkers or chemical groups. For example, the patents refer to the nucleotide analogues in Figures 7 and 8, including $3'-OR-G_{Tam}$, as “labeled with a unique fluorescent dye through *a* photocleavable **linker**” (JA0019 at 23:50-59) (emphasis added), even though it is

clear that the inventors assembled the linker by attaching two shorter linkers together.



(JA0005, Fig. 8 (annotated to show multiple linkers below); *see also* '458 Patent, JA0006, at Fig. 16.) Similarly, the Zhu reference (cited in the '458 patent (JA0010 at 2:63) and thus intrinsic evidence)⁴ uses the term “linker” to refer to the structure used to link the base to the tag, despite attaching multiple successive linkers to make that “linker.” (JA0128-131; Ex. 4, ¶¶ 77-78.) Plaintiffs also pointed to Illumina’s own patent that refers to the chemical structure between the nucleotide base and the label as a “linker” (singular) even though Illumina teaches that such

⁴ Although plaintiffs identified Zhu as extrinsic evidence during the hearing (Ex. 1 at 51:24-52:5), it is intrinsic evidence. *V-Formation, Inc. v. Benetton Grp. SpA*, 401 F.3d 1307, 1311 (Fed. Cir. 2005) (“This court has established that ‘prior art cited in a patent . . . constitutes intrinsic evidence.’”); *Waters Techs. Corp. v. Applera Corp.*, No. 02-1285, 2004 U.S. Dist. LEXIS 390, at *4 (D. Del. Jan. 13, 2004) (considering counsel’s misstatement when addressing a motion for reconsideration).


linkers may be composed of more than one shorter linker. (JA0119-121 at Figs. 1-3; JA0122-125 at 2:19-24, 2:33-37, 4:13-19, 4:37-40, 6:4-5, 6:39-67, 7:1-43.)

A few days after the claim construction hearing, Columbia filed a Patent Owner Preliminary Response (“POPR”) and supporting expert declaration in the IPR proceeding involving the ’458 patent. Thus, the POPR and expert declaration are part of the intrinsic record that the Court may consider in construing the claims. *Power Integrations v. Fairchild Semiconductor Int’l*, No. 08-309, U.S. Dist. LEXIS 118320, at *47 (D. Del. Dec. 18, 2009) (considering statements made during reexamination as “new intrinsic” evidence for the purposes of claim construction); *Cross Atl. Capital Partners v. Facebook*, No. 07-2768, 2011 U.S. Dist. LEXIS 27505, at *3 n.5 (E.D. Pa. Mar. 17, 2011) (considering “supplemental intrinsic” evidence in amending claim construction).

In the ’458 patent IPR, Columbia’s expert testified that “[a] POSA would understand that the term ‘chemical linker’ refers to the entire chemical structure linking the base to the tag, regardless of whether the structure consists of one or more chemical groups.” (Ex. 4 at ¶ 71.) He further testified that a POSA would refer to a structure as a singular “linker” even if made of smaller chemical groups, which “on their own can be referred to as linkers.” (*Id.* at ¶ 72.) Finally, as discussed above, he testified that the “linker” shown in Figure 2A of Prober, which is cited in the patents (JA0019 at 23:66-24:2) and thus part of the intrinsic record,

is made of “multiple chemical groups.” (Ex. 4 at ¶ 75.)⁵ Thus, the record is clear that a POSA understands “a linker” to include one made from smaller chemical groups.

E. As a Matter of Law, Columbia’s Statements in the Prior IPR Proceeding Are Not a Disclaimer

In construing “,” the Court found “at least two explicit disclaimers in the intrinsic evidence.” (Ex. 1 at 56:6-11.) To the extent the Court relied on Columbia’s statements as prosecution disclaimer, it erred as a matter of law.

Statements made before the PTAB do not control claim scope where, as here, the PTAB rejects them and invalidates, rather than upholds, the claims. *Galderma Labs, L.P. v. Amneal Pharms.*, 806 F. App’x 1007, 1011 (Fed. Cir. 2020). Here, the PTAB expressly rejected the argument that “the claim requires one linker, not two linkers,” finding instead that a linker “carr[ies] the meaning of ‘one or more’” and found the challenged claims unpatentable. (Joint Br. at 49; JA0036.)

Moreover, the purpose of a prosecution disclaimer is “to provide ‘public notice’” about the limited scope of *allowed* claims. *Power Integrations, Inc. v. On Semiconductor Corp.*, 396 F. Supp. 3d 851, 864 (N.D. Cal. 2019) (relying on

⁵ Illumina admits that Prober’s “linker” is made of multiple linkers. (Ex. 7 at Slide 49 (describing Prober’s Figure 2A as having a “propargyl amine linker and second linker”).)

Schriber-Schroth Co. v. Cleveland Trust, 311 U.S. 211, 220-21 (1940)). This public notice rationale does not exist when the PTAB disallows the claim. *Id.* at 866.

III. CONCLUSION

For the reasons stated above, Plaintiffs respectfully request that the Court clarify its construction as requested.

Dated: September 16, 2020

MORRIS, NICHOLS, ARSHT &
TUNNELL LLP

/s/ Jack B. Blumenfeld

Jack B. Blumenfeld (#1014)
Derek J. Fahnestock (#4705)
1201 North Market Street
P.O. Box 1347
Wilmington, DE 19899-1347
(302) 658-9200
jblumenfeld@mnat.com
dfahnestock@mnat.com

OF COUNSEL:

John D. Murnane
Robert S. Schwartz
Justin J. Oliver
Zachary L. Garrett
VENABLE LLP
1290 Avenue of the Americas
New York, NY 10104-3800
(212) 218-2100

*Attorneys for Plaintiff The Trustees of
Columbia University in the City of New York*

BALLARD SPAHR LLP

/s/ Beth Moskow-Schnoll

Beth Moskow-Schnoll (#2900)
Brittany M. Giusini (#6034)
919 N. Market Street, 11th Floor
Wilmington, DE 19801-3034
(302) 252-4465
moskowb@ballardspahr.com
giusinib@ballardspahr.com

OF COUNSEL:

Robert R. Baron, Jr.
Marc S. Segal
BALLARD SPAHR LLP
1735 Market Street, 51st Floor
Philadelphia, PA 19103-7599
(215) 665-8500

Chittam U. Thakore
BALLARD SPAHR LLP
999 Peachtree Street, NE., Suite 1600
Atlanta, GA 30309
(404) 420-9484

*Attorneys for Plaintiff QIAGEN
Sciences, LLC*

RULE 7.1.1 STATEMENT

Pursuant to D. Del. LR 7.1.1, the parties conferred regarding Plaintiffs' Motion for Reconsideration but did not reach agreement.

CERTIFICATE OF COMPLIANCE

The undersigned counsel for The Trustees of Columbia University in the City of New York and for QIAGEN Sciences, LLC certify that the foregoing MOTION FOR RECONSIDERATION OF THE COURT'S CLAIM CONSTRUCTION ORDER complies with the type, font, and word limitations in the Court's November 6, 2019 STANDING ORDER REGARDING BRIEFING IN ALL CASES. The foregoing Motion contains 2497 words (excluding the case caption, and the signature block) and was prepared using the Times New Roman typeface in 14-point font.

MORRIS, NICHOLS, ARSHT &
TUNNELL LLP

/s/ Jack B. Blumenfeld

Jack B. Blumenfeld (#1014)
Derek J. Fahnestock (#4705)
1201 North Market Street
P.O. Box 1347
Wilmington, DE 19899-1347
(302) 658-9200
jblumenfeld@mnat.com
dfahnestock@mnat.com

OF COUNSEL:

John D. Murnane
Robert S. Schwartz
Justin J. Oliver
Zachary L. Garrett
VENABLE LLP
1290 Avenue of the Americas
New York, NY 10104-3800
(212) 218-2100

BALLARD SPAHR LLP

/s/ Beth Moskow-Schnoll

Beth Moskow-Schnoll (#2900)
Brittany M. Giusini (#6034)
919 N. Market Street, 11th Floor
Wilmington, DE 19801-3034
(302) 252-4465
moskowb@ballardspahr.com
giusinib@ballardspahr.com

OF COUNSEL:

Robert R. Baron, Jr.
Marc S. Segal
BALLARD SPAHR LLP
1735 Market Street, 51st Floor
Philadelphia, PA 19103-7599
(215) 665-8500

Chittam U. Thakore
BALLARD SPAHR LLP
999 Peachtree Street, NE., Suite 1600

*Attorneys for Plaintiff The Trustees of
Columbia University in the City of New
York*

Atlanta, GA 30309
(404) 420-9484

*Attorneys for Plaintiff QIAGEN
Sciences, LLC*